

CLAIMS- Marked-Up Version

1. (Currently amended) An improved separation element of a corn head row unit comprising:
 - a. a source of power for rotation,
 - b. at least two opposing stalk rolls connected to said power source,
 - c. said stalk rolls having at least one flute,
 - d. said flute having at least one penetration point; and,wherein said penetration point is composed of hardened material.
2. (Currently amended) An improved separation element of a corn head row unit comprising:
 - a. a source of power for rotation,
 - b. at least two opposing stalk rolls connected to said power source,
 - c. said stalk rolls having at least one flute,
 - d. said flute having a knife edge; and,wherein said entire knife edge is composed of hardened material.
11. (Currently Amended) An improved separation element of a corn head row unit comprising:
 - a. a source of power for rotation,
 - b. at least two opposing stalk rolls connected to said power source,
 - c. each of said stalk rolls having at least one flute wherein the flutes are opposite each other,
 - d. said flutes having a knife edge; and,
 - e. said entire knife edge is composed of hardened material.
20. (Currently Amended) An improved method of engaging corn plants with a corn head row unit comprising the steps of:
 - a. engaging the corn plant with a plurality of rotational elements,
 - b. pinching the corn plant between said rotational elements,
 - c. penetrating the corn plant stalk with said rotational elements a pre-determined penetration depth, wherein the pre-determined penetration

depth of each of said rotational elements is less than half the diameter of the corn plant stalk,

- d. pulling the corn plant stalk with the rotational elements,
 - e. said penetrating, pinching and pulling steps repeatedly lacerating the corn plant stalk along its length and width; and,
- separating the corn plant ear from the corn plant stalk and husk.